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ABSTRACT

Grouping students homogeneously by ability level is a common practice in public middle and secondary schools. This practice persists despite research evidence that it actively hinders students' learning. To change grouping practices, however, concurrent changes must be made in the design of schedules, curriculum, and instruction. Such changes can be made in ways compatible with many effective teaching and learning practices that characterize the middle school. In fact, there are many small, concrete, and mechanical things that middle-level educators can do to create an environment that communicates to students the idea that learning is the most important thing in the school setting. Of numerous research findings and practical considerations related to heterogeneous grouping, none is more important than the fact that all students learn best in classes where the ability level is average or higher. This is the starting point for changing attitudes and practices. The time has come to close the door on homogeneous grouping at the middle level. (RH)

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GROUPING STUDENTS BY ABILITY: A REVIEW OF THE LITERATURE

Carol Spencer/Michael G. Allen

For the past twenty-five years the middle school movement has been characterized by flexibility, urging educators to examine the needs of early adolescents, yet cautious in endorsing particular grade configurations or school structures. In 1984 Lounsbury urged all middle level educators to consider whether time has come to "shut some doors." He wrote:

"....as I see it, there is danger in the middle school movement that we may have been too philosophically loose for the long-term good of the cause....We have been quite tolerant of widely varying practices.

If a room has many doors open, many things may find their way inside, including some undesirable ones....Some practices just don't belong in a bona fide middle school. They ought to be shut out."

(Lounsbury, 1984, p.55)

A survey of current research suggests that one of the practices which does not belong in the middle school is the practice of grouping students by ability for instructional purposes.

AN HISTORICAL OVERVIEW

The roots of tracking lie in the late 19th and early 20th century public schools, that found a greatly expanded secondary school population, comprised of the sons and daughters of the newly immigrated working class. With some variation through the decades, major societal assumptions from that time persist.

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A resurgence of commitment to tracking occurred in the late 1950's. In response to the need to upgrade the nation's technological capabilities, educators instituted specialized math, science and foreign language courses for upper level students.

One researcher suggests that "Tracking may stem more from what society perceives as its needs than from what would most benefit students" (Oakes, Part II 1986, p. 150). Teachers and parents of top students strongly influence curriculum. They believe these students need a program rich in both knowledge and abstract thought and skills. The articulate and more affluent nature of this constituency means that it is often overrepresented in program development.

The learning needs of the less able are viewed as more concrete, often including basic literacy and social skills which will enable them to function successfully in the world of work. Because of the high correlation between school achievement and socioeconomic status, the interests of the less able are often underrepresented when curriculum decisions are made. In placing students in low track classes,

"....Ample evidence suggests that placement in these programs begins a cycle of restricted opportunities, diminished outcomes, and growing achievement differences between low-track students and their counterparts in higher tracks. These placements do not appear either to overcome students' academic deficiencies or to provide them with future access to

high-quality learning opportunities." (Oakes, Part II p. 151).

There is a strong and growing practice of separating middle grades students into special ability groupings. This has persisted despite the centrality of the notion of flexible scheduling and interdisciplinary teams as more appropriate structures than the fixed scheduling and departmentalization practiced at the secondary level.

Tracking and ability grouping have continued because administrators and teachers believe that achievement is enhanced by tracking; that self-esteem of less able students will suffer if they are forced to compete in classes of mixed ability; that top students need the stimulation of their peers in order to benefit fully from school; and, that it is more efficient and effective for teachers to plan lessons that are directed at a 'high group' or a 'low group.' Research has shown that these strongly held beliefs are not sound precepts on which to shape curriculum, teaching practices, or student grouping.

THE RESEARCH

A body of research has emerged which describes the impact of grouping students by ability or achievement. The evidence suggests that homogeneous grouping students actively hinders most students' learning.

The purpose of this article is to argue that the time has come to change the practice of grouping students by ability, and to 'shut the door' on this highly undesirable custom. An overview of relevant research, and a description of heterogeneous

grouping practices compatible with the needs of early adolescents are offered in support of the change.

Statistics reveal that grouping by ability or 'tracking' is a common practice in the United States. Findley and Bryan (1975) put the figure at 77% of school districts. Their findings confirm a similar figure published by the Department of Health, Education and Welfare (1968).

The National Association of Secondary School Principals (1981) surveyed over 1400 middle level principals and found that despite the fact that existing research "fails to justify the use of ability grouping in schools," an 'amazing' 88% of the 1400 schools reporting used tracking, including 89% of the 7-8-9 and 6-7-8 schools, and 80% of the 5-6-7-8 schools.

The NASSP study found the practice less common in smaller, rural schools, and as common in schools with wide disparity of achievement scores as in those with a narrow range. They noted little change in the frequency of use between their 1966 Junior High Study and the 1981 Middle Level Study (Valentine, et al, 1981).

A 1987 study of 750 Pennsylvania schools found that at the seventh, eighth and ninth grade levels, 90% of the schools tracked by ability (Center for Research, 1987).

Various surveys show that before the practice of ability grouping can change, the attitudes held by teachers and administrators must be altered. A recent study described the beliefs that underlie the current widespread practice of ability grouping.

"First, and clearly most important, teachers and administrators generally assume that tracking promotes overall student achievement...

A second assumption that underlies tracking is that less-capable students will suffer emotional as well as educational damage from daily classroom contact and competition with their brighter peers. Lowered self-concepts and negative attitudes towards learning are widely considered to be consequences of mixed-ability grouping for slower learners....

And finally, most teachers and administrators contend that tracking greatly eases the teaching task and is, perhaps, the only way to manage student differences (Oakes, 1986, Part I pp. 13-14).

Findley and Bryan (1962) found that 87 percent of secondary school teachers approved ability grouping. The NASSP survey showed that 59% of the responding principals both favored and practiced ability grouping in all grades and in certain subjects. They reported an increase from 52% to 59% in both attitudinal support and practice between 1966 and 1981 and concluded that research on the unfavorable effects of ability grouping had not reduced the level of practice (NASSP, 1981, p.84).

A recent survey of research on ability grouping, examined the effect of ability grouping on students at the secondary level. Citing a metaanalysis conducted in 1982, the report concluded:

"....When James and Chen-Lin Kulik aggregated data

from studies in which secondary school students were assigned randomly to either mixed or tracked classes, they found that students in the tracked classes learned neither more nor less than the others. The longer the intervention, the more recent the study, and the better the research methods, the less evidence there was that students learned more when grouped by ability."

(Featherstone, 1987, p. 2).

Achievement for most students is not enhanced by tracking. While there are slight gains for top level students, they are not significant. There is no difference for the middle group, and the lower group actually learns less.

In attempting to understand this lack of academic results from ability grouping, resarchers have looked at different aspects of tracked systems, including teachers' instructional procedures and expectations, and the behavior and self-esteem of students. Once students are placed into groups by ability, the "group" replaces the individual as the focus of instruction. Teachers tend to "teach the group," believing that they are teaching a homogeneous body of 20-30 students.

Brophy and Good, (1974) found that teachers "overreact to grouping labels so that their teaching is not appropriately matched to student ability levels." Oakes (1981) also questioned the assumption that tracking makes teaching easier, reasoning that this would be true only if a group were truly homogeneous. She contended that groups of 20-35 need variety of instructional methods, of learning tasks, of materials, feedback and rewards,

often missing as the need is deflected by the perception of the tracked classes as homogeneous.

There is more instructional time spent by teachers and students in high track classes. The curriculum is more complex and more closely reflects the knowledge and values of our society. There is more homework assigned to students in high "academic" tracks, ironic in light of research which confirms that one of the real differences in student learning is speed. Some students learn more slowly than others. Homework is seen as one of the great equalizers, raising the scores of average and lower level students significantly when completed as little as an hour and a half per week.

Flowers' study (1966) created fictitious ability groups in two different junior high schools, in two different cities. At the conclusion of the study, he asked teachers questions about students' performance. Compared to the teachers of the control groups, teachers of the fictitious "superior" groups:

....(1) referred more often to what the children could do rather than what they could not do, (2) found virtually no discipline problems in class..., (3) referred more often to efforts to motivate their pupils and less often to the inadequacy of teaching materials, and (4) preferred teaching the 'higher' ability group. (Flowers, 1966, in Johnston & Markls, p. 57).

The planning teachers do for each class and the expectations they hold for each student are two powerful factors associated with high achievement. Effective teachers set high expectations

for their students and organize their instruction so that students can be successful in meeting those expectations. The research indicates that tracking does not stimulate or enhance either of these criteria for high achievement.

The connection between positive self-concept and successful school achievement is well established. Most teachers do all that they can to praise and encourage students in their efforts, so they will feel good about themselves and recognize their successes.

Oakes (1981) reported that rather than raising self-esteem, "...tracking can reduce self-esteem, lower aspirations, and foster negative attitudes about school. Some students have also concluded that tracking leads low-track students to misbehave and eventually to drop out altogether." (Oakes, Part I p. 14) This conclusion was echoed in the earlier work of Findley and Bryan (1975). A recent review of the literature concluded that "Student perceptions of self and others are affected by the ability group to which they are assigned." (Johnston and Markle, 1986, p. 58).

At its extreme, the result of diminishing self-esteem in lower-track students can be linked to an argument which says that the schools are actually nurturing the factors which keep a child stuck in the low socioeconomic class as adults. In concrete terms, every practitioner has seen the result: students look around the room and take a measure of themselves by whom else is present.

Low and average track placement is a clear signal from the

school to the student. Similarly, placement in top track classes is a signal that one is special, different, and better. At the middle level, where peer relationships first emerge as a overriding concern, elitist attitudes from top track kids emerge as part of the way they describe the world. Top track students believe there is nothing to be learned from students in lower tracks.

Concomitantly, the lower tracked students, robbed of role models, feel free to act out the school message that they are dumb and slow. They do so far more frequently than their top tracked peers, resulting in less time-on-task, less teaching of content/skills, and less learning. They resent, speak poorly of, and even show hostility toward students perceived as smart, privileged, or in compliance with the expectations of the school. Regarding ability grouping, Johnston and Markle state:

"The practice of grouping students by ability for instructional purposes is not supported by research. Even though a majority of teachers believe that ability grouping improves the effectiveness of schooling, the studies reviewed suggest that the practice has deleterious effects on teacher expectations and instructional practices..., student perceptions of self and others, and academic performance of lower ability students. It interferes with opportunities for students to learn from--and learn to accept--peers of different socioeconomic backgrounds, and may perpetuate notions of superior and inferior classes of citizens.

The practice is especially antithetical to the goals and objectives of the middle school." (Johnston & Markle, 1986, pp. 56-57).

IMPLICATIONS OF THE RESEARCH

Given the predominance of grouping students by ability in our public middle and secondary schools, there is a dearth of information about alternatives to this practice. The research suggests that grouping students heterogeneously is preferable. Following is a sketch of some of the components necessary for successful heterogeneous grouping.

Forming the Groups

While a random computer sort certainly provides one type of heterogeneity, the groups produced are likely to be skewed. It is important to balance students coming into the middle school by feeder town/school, sex, achievement level, behavior and maturity level. With this information available, it is possible to create individual sections and teams which are a microcosm of the whole.

Further, it is especially important to examine each child's profile individually for one criterion which has a great impact on the class composition (e.g. amount of teacher time needed). Is the student a fairly independent learner, or is a great deal of individual attention necessary? One practical way to accomplish this is to gather data from parents and the previous year's teacher on a form designed by the middle school. Categorize the responses, assigning ratings by quartile in the

achievement/maturity/time from teacher categories.

The next step is to conduct a human sorting or "Go Fish" activity in which teachers and counselors create sections by matching student profiles to the whole group statistics. Recent introduction of database to this process has reduced the pre-sort tallying hours greatly.

Creating The Master Schedule

There are two common types of grouping practiced at the middle level: grouping for particular courses such as foreign language, algebra, and accelerated core courses; and, residual tracking. Residual tracking is the informal grouping that happens as a result of the intentional tracking. Frequently, classes such as art and Physical Education will show a decided skew high or low; tracing the cause leads back to English or Algebra.

There is a major and inexcusable difference between creating a tracked secondary schedule and creating an un-tracked, teamed middle school schedule. They are two almost unrelated processes. In a middle level schedule, the scheduler is moving groups of students around, in order to create team schedules that use and coordinate, but do not overload, existing staff time.

To date, no computerized version comparable to the many secondary packages, exists. The work must be hand done. Identify the number of sections of core courses. Build a coordinated team schedule for one team at a time, after placing the "givens" into the schedule.

Given the existence of Algebra in many middle level curriculums, the key scheduling goal becomes the prevention of residual tracking from courses such as Algebra. This can be done by building a cross-teamed 8th grade math course opposite every section of Algebra. There must be more than one section of Algebra if there is more than one section of 8th graders, even if this means artificially small Algebra classes.

Teacher Advisory

One of many benefits of a randomly assigned Teacher Advisory program is the clear message that all students are equally valued. Because it is both a social and learning time, students who ordinarily might not choose to spend time together learn to appreciate one another.

A healthy Teacher Advisory program can reduce the impact of peer group cliques, foster acceptance of and respect for students of varying abilities and provide a concrete opportunity for students to function in a different social milieu than their immediate peer group.

Curriculum

Curriculum in a heterogeneously grouped school is shaped by the belief that all students should learn grade appropriate content and skills. One approach is to organize courses around learning themes, such as "Native Americans," "Pre-revolutionary America," and "Consumer Education," and to infuse throughout every course a consistent study skills focus.

The curriculum emphasizes broadened, horizontal exploration of topics, rather than accelerated high school courses for the brightest students. It provides instruction in basic skills for remedial students, while insuring their access to grade appropriate content and intellectual growth. These two notions stand in contrast to the content of high and low tracked courses, which are typically either vertically accelerated to high school courses, or simplified to focus on skills acquisition isolated from content.

Instruction

At the heart of change in any school lies the classroom teacher. Instruction in a heterogeneously grouped school is different from traditional, homogeneously grouped instruction. Teaching methods long espoused by middle school advocates are compatible with those demanded by the presence of students with a wide range of abilities in the same classroom. Multi-level instruction provides an opportunity for students at different levels to tackle the same content, while working at their own skill level.

Teachers plan for some whole group instruction on key ideas and skills, while providing leveled materials, activities, and expectations for two to three groups within the class. Grouping is flexible within the classroom, divided homogeneously for some activities, and heterogeneously for others. Whatever concepts are shared by all groups are shared in the large group.

Students understand the basis for the division into

groups. They have metacognition about why they are reading one novel while another group is reading a different one. Learning disabled students, mildly retarded students, and students who qualify for Chapter I instruction are a part of regular classes.

Study skills teachers, Special Educators and paraprofessionals move out of the special programs and into the regular classroom, working with small groups in full classes. They plan jointly when possible; they alter materials and model effective teaching of special needs children for regular education teachers. They change groups with the regular classroom teacher, so that their presence is understood to be necessary for all students to learn more effectively.

Teachers use large and small group techniques including cooperative learning, structured, large group discussion, role playing, project centered learning, study guides, and long range assignments to provide needed diversity, to stimulate motivation, and deviation from pencil and paper tasks to allow different students to excel during class.

This change is difficult for secondary trained teachers. Traditionally, junior and senior high teachers are subject-matter specialists. Few have background in reading-in-the-content area or special education. However, with support of strong professional development opportunities, teachers can and do change the way that they teach heterogeneous grouped students.

Enhancing the Academic Emphasis

One of the advantages listed by supporters of homogeneous grouping is that when top students are grouped together, they learn a respect and love for learning that is prohibited by other students' anti-intellectual attitudes. It is important for all students to go to a school which emphasizes learning.

At the middle level, the message needs to be clear, concrete and overtly manifested. One awards assembly at the end of the year is not enough. Seasonal assemblies allow far more recognition of far more students. Making those assemblies entertaining as well as serious and respectful motivates students to want to earn recognition.

There are other ways of sending the message, that learning is highly valued. Expect and require all students to keep notebooks. Shape instruction so there are open note tests, a practice which speaks to several educational needs. Teach students notebook keeping systems that are consistent by team or by grade; this is an enabling skill which will have positive side effects at the middle school level and later on.

Require all students to complete and turn in homework and classwork. Have a tiered system of consequences that take place if a students choose not to complete work, including after school work time, guided study, homework sheets signed by teachers and parents, and correlation between free time and completed work.

Do not support the notion that at this age students have the right to fail. Require assignment books, in which students list all assignments, short and long range. Inform parents about the notebooks, so that at long last they have the opportunity to get first-hand information from their child when they ask, 'Don't you have any homework tonight? Where are your books?'

Monitor the possession and use of assignment books until they become a habit. Require students to come to class with a pencil, pen, notebook and covered text. Check for preparedness daily. Send interim reports home for each child in each course, reporting on gains and successes as well as failures.

Each of these practical examples of good structure helps to communicate to students of all ability levels that their learning is primary. Often in a secondary-type junior high the work involved in setting up systems for successful learning is far greater than the job of monitoring failure--failure to turn in assignments, or failing grades on quizzes. Teachers likely teach 100+ students, and have come to believe that children have the right to fail. An early and crucial step in changing from homogeneous to heterogeneous grouping is to identify and change this belief. Working closely with parents, and coming to consensus within the faculty about the expected success rate for students strengthens the academic atmosphere for all students.

CONCLUSIONS

Grouping students homogeneously by ability level is a common practice in public middle and secondary schools. This practice persists despite research evidence that it actively hinders students' learning. A change in grouping practices must be accompanied by a change in the design of schedules, curriculum and instruction. These changes are compatible with many good teaching/learning practices that characterize the middle school.

There are many small, concrete and mechanical things middle level educators can do to create an environment which says to every student--learning is important here, and your learning is the most important thing of all.

Of the research findings and practical considerations, none is more important than the reality that all students learn best in classes where the ability level is average or higher. This is the starting point for changing attitudes and practices. The time has come to close the door on homogeneous grouping at the middle level.

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